**WHAT IS CLAIMED IS:**

1. A method in a packet switched telecommunications network comprising a plurality of nodes for providing resource reservation between a reservation initiator (RI) and a reservation receiver (RR) comprising the steps of:

- defining an object including descriptors of the desired Quality of Service (QoS), packet level traffic parameters characterizing the traffic envelope, and one or more sub-objects of description of the source statistics for a call admission control (CAC);
- initializing reservation for a flow of transmission in the reservation initiator;
- reserving resources in the nodes along the flow of transmission;
- receiving reservation message in the reservation receiver;
- sending back an acknowledgement to the reservation initiator.

2. The method of claim 1 wherein packet switched telecommunications network is an IP based network.

3. The method of claims 1 - 2 wherein nodes are routers of a Terrestrial Radio Access Network of a Universal Mobile Telecommunications Network (UTRAN).

4. The method of claims 1 - 3 wherein the call admission control uses at least one sub-object of source statistics description in each node along the flow of transmission.

5. The method of claims 1 - 3 wherein the call admission control uses at least one sub-object of source statistics description in edge nodes of a resource domain along the flow of transmission.

6. A system for providing resource reservation in a packet switched network including a reservation initiator (RI), a reservation receiver (RR) and a plurality of nodes linked together by transmission channels, in which system the resource reservation of an ON-OFF like traffic is implemented and wherein at least a part of the plurality of nodes include:

- means for processing descriptors of the desired QoS;
- means for processing packet level traffic parameters characterizing the traffic envelope, and
- means for processing description of the source statistics.

7. The system of claim 6 wherein the reservation initiator (RI) is a base station controller and the reservation receiver (RR) is a radio network controller of the packet switched network.

8. The system of claim 6 wherein the reservation initiator (RI) is a radio network controller and the reservation receiver (RR) is a base station controller of the packet switched network.

9. The system of claims 6 - 8 wherein the nodes are IP routers of an IP network.

10. A node in a packet switched telecommunications network including sub-objects of

- descriptors of the desired QoS;
- packet level traffic parameters characterizing the traffic envelope, and
- description of the source statistics;

11. The node of claim 10 wherein the sub-object of description of the source statistics comprises information about type and at least one parameter of the distribution of the traffic.

12. The node of claims 10 - 11 wherein the traffic is an ON-OFF like traffic.

13. The node of claim 12 wherein the distribution type of the length of the ON and/or OFF periods are exponential.

14. The node of claim 12 wherein the parameter of the length of the ON periods is the mean time of ON periods.

15. The node of claim 12 wherein the parameter of the length of the OFF periods is the mean time of ON periods.